

(QIAGEN Lambda System). The phage DNA was digested with *Xba*I and *Sa*I, and the resulting *Xba*I-*Sa*I fragment of about 1.9 kb was subcloned between *Xba*I-*Sa*I of pBluescript II SK(+). The thus constructed plasmid was named pBS-G3.

(3) Determination of a nucleotide sequence of the cDNA inserted into plasmid pBS-G3

A full nucleotide sequence of the cDNA contained in the pBS-G3 obtained in the above (2) was determined by the following method.

By using primers (M13-20 primer and reverse primer) specific for a sequence in pBluescript II SK(+), 5' side and 3' side sequences of the cDNA were determined. Synthetic DNAs specific for the determined sequences were produced, and further nucleotide sequences of the cDNA were determined by using the DNAs as primers. The full nucleotide sequence of the cDNA was determined by repeating this procedure.

Please substitute the paragraph at page 128, lines 19-23 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

By comparing Table 2, Table 4 with Table 6, it was confirmed also that the β 1,3-N-acetylglucosaminyltransferase (G7) is an enzyme having a substrate specificity which is clearly different from that of the other β 1,3-N-acetylglucosaminyltransferases (G3 and G4) obtained according to the present invention.

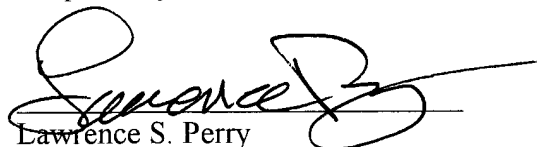
REMARKS

The specification has been amended to correct typographical errors. No new matter has been added.

Entry hereof is earnestly solicited.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Lawrence S. Perry", written over a horizontal line.

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LSP\ac

NY_MAIN 242905 v1



Application No. 10/019,735
Attorney Docket No. 00005.001196

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO SPECIFICATION

The paragraph at page 23, lines 3-16 have been amended as follows:

As the cloning vector for preparing a cDNA library, any one of phage vectors, plasmid vectors and the like can be used, so long as it can replicate autonomously in *Escherichia coli* K12. Examples include ZAP Express [manufactured by STRATAGENE, *Strategies*, 5, 58 (1992)], pBluescript II SK(+) [*Nucleic Acids Research*, 17, 9494 (1989)], λZAP II (manufactured by STRATAGENE), λgt10 [*DNA Cloning, A Practical Approach*, 1, 49 (1985)], λTriplEx (manufactured by Clontech), λExCell (manufactured by Pharmacia), pT7T318U (manufactured by Pharmacia), pcD2 [*Mol. Cell. Biol.*, 3, 280 (1983)], pUC18 [*Gene*, 33, 103 (1985)], pAMo [*J. Biol. Chem.*, 268, 22782 (1993), alias pAMoPRC3Sc (Japanese Published Unexamined Patent Application No. 336963/93)] and the like.

The paragraph at page 24, lines 5-21 have been amended as follows:

Based on the nucleotide sequence of a candidate gene found by the data base search, primers specific for the gene are designed and PCR is carried out by using the thus obtained single-stranded cDNAs or a cDNA library as the templates. When an amplified fragment is obtained, the fragment is subcloned into an appropriate plasmid. The subcloning can be carried out by inserting the amplified DNA fragment directly, or after its treatment with a restriction enzyme or DNA polymerase, into a vector in the usual way.

Examples of the vector include pBluescript SK(-), pBluescript II SK(+) (both manufactured by STRATAGENE), pDIRECT [*Nucleic Acids Research*, 18, 6069 (1990)], pCR-Amp SK(+) [manufactured by Stratagene, *Strategies*, 5, 6264 (1992)], pT7Blue (manufactured by Novagen), pCR II [manufactured by Invitrogen; *Biotechnology*, 9, 657 (1991)], pCR-TRAP (manufactured by Genehunter), pNoTA_{T7} (manufactured by 5' → 3') and the like.

The paragraph at page 33, lines 5-20 have been amended as follows:

Examples of the expression vector include pBTrp2, pBTac1, pBTac2 (all available from Boehringer-Mannheim), pSE280 (manufactured by Invitrogen), pGEMEX-1 (manufactured by Promega), pQE-8 (manufactured by QIAGEN), pKYP10 (Japanese Published Unexamined Patent Application No. 110600/83), pKYP200 [*Agric. Biol. Chem.*, 48, 669 (1984)], pLSA1 [*Agric. Biol. Chem.*, 53, 277 (1989)], pGEL1 [*Proc. Natl. Acad. Sci. USA*, 82, 4306 (1985)], pBluescript II SK(-) (manufactured by STRATAGENE), pTrs30 (FERM BP-5407), pTrs32 (FERM BP-5408), pGHA2 (FERM BP-400), pGKA2 (FERM B-6798), pTerm2 (Japanese Published Unexamined Patent Application No. 22979/91, US 4686191, US 4939094, US 5160735), pKK233-2 (manufactured by Pharmacia), pGEX (manufactured by Pharmacia), pET system (manufactured by Novagen), pSupex, pUB110, pTP5, pC194, pTrxFus (manufactured by Invitrogen), pMAL-c2 (manufactured by New England Biolabs) and the like.

The paragraphs at page 73, lines 3-22 have been amended as follows:

As a result of the plaque hybridization, one hybridized independent clone was obtained. Phage DNA was prepared from this clone by using a kit manufactured by Qiagen (QIAGEN Lambda System). The phage DNA was digested with *Xba*I and *Sal*I, and the resulting *Xba*I-*Sal*I fragment of about 1.9 kb was subcloned between *Xba*I-*Sal*I of pBluescript II SK(+). The thus constructed plasmid was named pBS-G3.

(3) Determination of a nucleotide sequence of the cDNA inserted into plasmid pBS-G3

A full nucleotide sequence of the cDNA contained in the pBS-G3 obtained in the above (2) was determined by the following method.

By using primers (M13-20 primer and reverse primer) specific for a sequence in pBluescript II SK(+), 5' side and 3' side sequences of the cDNA were determined. Synthetic DNAs specific for the determined sequences were produced, and further nucleotide sequences of the cDNA were determined by using the DNAs as primers. The full nucleotide sequence of the cDNA was determined by repeating this procedure.

The paragraph at page 77, lines 20-27 have been amended as follows:

By using primers (M13-20 primer and reverse primer) specific for a sequence in pBluescript II SK(-), 5' side and 3' side sequences of the cDNAs were determined. Synthetic DNAs specific for the determined sequences were produced, and further nucleotide sequences of the cDNAs were determined by using the DNAs as primers. Full

nucleotide sequences of the cDNAs were determined by repeating this procedure.

The paragraph at page 128, lines 19-23 have been amended as follows:

By comparing Table 2, Table 4 with Table 6, it was confirmed also that the β 1,3-N-acetylglucosaminyltransferase [(G3)] (G7) is an enzyme having a substrate specificity which is clearly different from that of the other β 1,3-N-acetylglucosaminyltransferases [(G4 and G7)] (G3 and G4) obtained according to the present invention.

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